

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 9781585915002	Publisher - It's About Time, Herff Jones Education Division	Provided by the Publisher
Investigating Earth Systems Select 1			
Type - P1	Author - Smith, Michael J. and Southard, John B. et al		
Copyright - 2006	Edition - 1st	Readability - 960	
Course - Earth/Space Science		Grade(s) - 6, 7, 8	
Teacher Edition ISBN if applicable		9781585915019	

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

For this review, the teacher's edition was not available.
The length of the procedures is often too long. The procedures need to be broken into smaller pieces for younger students to use. The text appears to rely too much upon the written language, the number of diagrams, graphs, and illustrations should be increased. This will assist all learners, especially ESL and below grade level learners.

This textbook is primarily inquiry. The teacher will need to supplement the text with connections to real-life, technology and additional readings.

Some of the activities would be safer if done as a teacher demonstration or as a computer simulation.

The textbook is not one that you can pick-up and use right away. A teacher will need to attend training prior to use and have the opportunity to try all the activities to determine how these activities need to be modified for your students.

The book attempts to incorporate your local environment into the instruction. This will require a teacher to uncover sources for local topographic maps, rock samples, and other geolocial information.

This text is better for 7 and 8 grade due to the amount of reading required.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

☐ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

a) Structure and Transformation of Matter

☐ Strong ☐ Moderate ☐ Little ☒ N/A

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- | | |
|---|---|
| b) Motion and Forces | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |
| c) The Earth and the Universe | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| d) Unity and Diversity | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |
| e) Biological Change | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Little <input type="checkbox"/> N/A |
| f) Energy Transformation | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Little <input type="checkbox"/> N/A |
| g) Interdependence | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| 2) Addresses content-specific enduring understandings from the related Program of Studies standards. | |
| | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| 3) Addresses content-specific skills and concepts from the related Program of Studies standards. | |
| | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| 4) Content addressed is current, relevant and non-trivial | |
| | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| 5) Provides opportunities for critical thinking/reasoning | |
| | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| 6) Strengths, Weaknesses, Comments: | |
| <ul style="list-style-type: none"> Specific strengths-which areas/concepts are covered exceptionally well? Specific weaknesses-which areas/concepts would likely require supplementing? | |

The major strength of this student text is the amount of critical thinking/reasoning.

Pulling all the information together for the students will be a key. For students that do not learn well from doing or reading, additional instruction will be needed.

B. Functionality & Suitability

- ☐ **Strong Evidence**
☒ **Moderate Evidence**
☐ **Little or No Evidence**

- | | |
|---|---|
| 1) Suitability | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| <ul style="list-style-type: none"> Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind. | |
| 2) Content quality | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| <ul style="list-style-type: none"> Free from factual errors Content is presented conceptually when possible—more than a mere collection of facts Content included accurately represents the knowledge base of the discipline Theories/scientific models contained represent a broad consensus of the scientific community | |

3) Connections to Literacy

Note: may apply to either student or teacher editions

☐ Strong ☐ Moderate ☒ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) Connections to Technology

☐ Strong ☐ Moderate ☒ Little

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☐ Moderate ☒ Little

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms

Note: may apply only to teacher edition

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The text has no support of ESL students. Also, lacks support for differentiation. The use of technology is limited and the technology pictures are out of date. The text does not include visual clues for student to identify the key vocabulary.

The text has an expectation of student model development that is congruent to their cognitive abilities.

C. Supports Inquiry and Skill Development

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.

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- Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
- Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
- Provides opportunities to examine a range of types of evidence
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

This is the strenght area for this textbook. Almost all concepts are approached with hands-on, minds-on inquiry activities.

Teachers need to perform all the inquiry activities in a unit before using with students.

D. Supports Best Practices of Teaching and Learning

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Engages Students

☐ Strong ☒ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☐ Strong ☐ Moderate ☒ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

The textbook does include a teachers edition, but was not available for review.

Does a good job of simulations, experiments and data gathering. The book makes an attempt to include activities that are congruent to their environment, but will require a great deal of work for teachers to collect the required materials.

In the student text, the activities include questions for the students to reflect upon, provides some clues for students to determine what they should be reading, and at the end had questions for students to answer from the experiments and the reading. Some of the questions go beyond DOK 1 and 2.

E. Has an Organization/ Format that Supports Learning and Teaching

- ☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Organizational Quality

☐ Strong ☒ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size

Included media are durable, easy to use and have technical merit

- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☐ Strong ☐ Moderate ☒ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The organization of the units takes time to become comfortable with, but is consistent from unit to unit. The lessons have a logical sequence that builds upon each other. Several of the pictures lack a caption to identify the location.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend

- ☐ Strong Evidence
☐ Moderate Evidence

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this resource as a basal should not be influenced by Section F

☒ **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

No additional materials available for this textbook.